security considerations at an early date would be accomplished if the Office of Security could also have a representative attend maetings of the IP Board and the Technical Review Committee of OCS.

Recommendation No. 8

- a. That the IP Board invite a security advisor to be present at all Board meetings.
- b. That OCS have a security advisor present at all meetings of its Technical Review Countitee.
- 3. The security constraints associated with the use of AIP may well be the key factor in determining how fast and how far the Agency can go in utilizing computerized inhouse and community-wide interactive and/or time-sharing information systems. Nore in-depth analysis is needed to clearly identify the degree of vulnerability and risk involved, and to devise and test the controls required in establishing acceptable security standards. The skills required for such studies and experiements are in short supply, and unless this task is accorded a high priority, the benefits contemplated from timesharing interactive services will most likely have to be deferred pending the solution of security problems. Some tough decisions lie ahead for top-level management in connection with balancing the traditional requirements for security compartmentation of information against the advantages which might accrue from ADP interactive timesharing services if these requirements were related. Agency management will need all the expert advice and assistance it can get on

this problem.

- 4. In spite of the foregoing recognized need for expert security advice, rather than increasing the OS capability in the ADP field as we believe in necessary, a recent decision was made to reduce the number of security people working on ADP matters. We fear that this may be false economy. The Agency will most certainly need an increased number of highly qualified individuals in the field of ADP security.
- 5. OCS participates in the Community On-Line Intelligence System experiment (COINS), first proposed by the President's Foreign Intelligence Advisory Board (PTIAB). This system has many of the same security problems as those outlined above.
- 6. Officials in OCS believe that COIMS would best meet FWIAB hopes if it were a time-sharing, multi-classification level system. Such a system would allow a user to query only those files for which he was cleared or had a need-to-know. It would eliminate the need for all users to have all clearances for all files in the system. The adoption of such a system would also fit with the OCS proposal for one central COIMS computer rather than the many now employed.
- 7. The Security people, however, have problems with such a system. Two OCS officials told us that our Office of Security believes that there is no way to make a COIMS time-sharing system secure but that OS has not put their ressons in writing. OCS also expressed

concern about the limited amount of effort OS was giving the timesharing security problem. The OCS officials are convinced that a
time-sharing multi-clearance level COINS can be made secure and
second disturbed about what they viewed as an intransigent position
on the part of OS. The OS officer responsible for Agency ADP security
was then interviewed to determine if a true impasse existed.

- 8. The OS ADP officer, who is also Chairman of the ADP Security Subcommittee of the USIB Security Committee, confirmed the OCS view that Security believes time-sharing with the IGM 360/67 with multi-clearance level files has security problems. At the present time there are about 50 remote terminals tied to our Agency time-sharing 360/67. A great many people have access to the 50 terminals. Nore people have access to the computer and the files in OCS. If a 360/67 such as ours were then the one central computer for COIMS, posnibly thousands more would have access to the files. More thousands of people would be added if DIA ties the Unified and Specified Commands to COIMS as they have proposed. Unlike the "old days" wherein Security concentrated on people and the files they kept in a few safe drawers, OS believes it is now faced with a problem over which it could lose all security control.
- 9. OS believes that the advent of the first ADP-based files multiplied the potential for spillage, tampering, and penetration of intelligence information. In their view, time-sharing has made the

problem many, many times worse. OS then raises the question of the degree of security we can now accept with time-sharing and how this degree of security is to be established.

- 10. OS believes cortain steps must be taken to establish the degree of security that is acceptable with the 360/67. These are as follows:
 - a. Determine the security features in the ADP system.
 - b. Determine the security flaws in the system.
 - c. Test the system with a controlled experiment.

Each step has sub-steps. For example, in item b., Security would want to study the hardware for flaws. The executive software that controls the hardware would also have to be studied for flaws. They would also have to look at the individual job programs, the access control, the case of penetration, etc.

- 11. OS feels that these three steps would then give them a "ball park" understanding of the system's security. OS does not now have the capability to do even this basic job. With this in mind, it is understandable why they have not done more with OCS to work out the security problems of a COINS multi-clearance, multi-access time-sharing system.
- 12. OS believes that the basic nampower requirement to do the "ball park" study outlined above would take a six-man group. The group would include two computer bardware design specialists, two

computer systems programmers, and two security people, at least one of whom would have ADP experience.

when they are being asked to cut back in manpower. There is then the question of where OS allocates its effort. From the CCE's view, more should be directed toward the time-sharing ADP security problem. In our judgment, the Agency has made a large commitment to time-sharing ADP as well as to the COINS experiment. We doubt that our commitments in these two areas will diminish or even hold steady. An expanded effort appears inevitable. The IG Audit Staff is now acquiring an ADP audit capability in recognition of the continuing and expanding audit requirements in this area. We believe the Office of Security must also give ADP an increasing amount of attention.

Recommendation No. 9

That OCS and OS review their ADP security manpower requirements and develop measures to insure the secure, compartmented use of the OCS time-sharing 360/67 system both for CIA internal needs and for potential COINS applications.

14. Emergency Planning - One major unsolved problem in the CCS field of activities which has a security connotation is the lack of backup equipment in the event of disaster. There currently exists no formal contingency plan of any kind to provide for continuation



- 3. The technical people that carry out our ADF efforts are highly trained and skilled specialists. Competition for their services is intense. However, OCS has been able to hire these people, but holding them has been more difficult. We believe that OCS would hold more than they do if the Office working environment could be expanded and improved.
- 4. The OCS management is fully aware of the space problem and has struggled toward a solution. The Office managers are concerned about rearranging, cleaning, and brightening up their work areas, and taking steps to cut down on the noise level. In our judgment, however, more remains to be done.

Recommendation No. 13

That DDS arrange for a thorough study of OCS space needs and, upon completion, take whatever action possible to satisfy the needs.